

Title (en)
ARTICULATED ROBOT

Title (de)
GELENKROBOTER

Title (fr)
ROBOTS ARTICULE

Publication
EP 0666150 B1 19981021 (EN)

Application
EP 94923081 A 19940805

Priority
• JP 4952993 U 19930818
• JP 9401300 W 19940805

Abstract (en)
[origin: EP0666150A1] In a wrist structure for articulated robots, having a work clamping means affixed to a base portion (2) adapted to be turned around a vertical pivot (S-shaft) by an S-shaft driving motor (21) provided on a base (1); a first arm (3) which is a rotary portion (7) capable of being turned around a pivot (T-shaft), which extends perpendicularly with respect to the pivot (B-shaft) of the wrist (6), by a T-shaft driving motor (71) provided on a base portion of the arm (4); a first wrist link (63) which extends on an extension of the arm (4) fixed to the wrist (6), and which is fixed to the outer periphery (67) of the rotary portion (7); a second wrist link (64) fixed to an output shaft (73) of the rotary portion (7); a third wrist link (65) pin-connected to an end portion of the first wrist link (63) so that the third wrist link can be turned; a fourth wrist link (66) pin-connected to end portions of the second and third wrist links (64, 65) and extending in parallel with the first wrist link (63); and a work clamping means (81) fixed to the pivot pin of the third wrist link (65) are provided. A buffer means (9) is provided between the wrist (6) and the first wrist link (63) or second wrist link (64). This invention can provide a wrist structure having non-reinforced arms and a T-shaft driving motor of a small load, capable of being operated at a high speed and kept safe even when the work clamping means collides with an obstruction. <IMAGE>

IPC 1-7
B25J 17/02; **B25J 19/06**

IPC 8 full level
B25J 9/10 (2006.01); **B25J 17/02** (2006.01); **B25J 19/06** (2006.01)

CPC (source: EP KR US)
B25J 9/1065 (2013.01 - EP US); **B25J 17/02** (2013.01 - KR); **B25J 17/0241** (2013.01 - EP US); **B25J 19/063** (2013.01 - EP US)

Cited by
CN109317974A; CN104626141A; CN105945936A; CN103817708A; CN105945987A; CN105965539A; KR20150086277A; US8855817B2; WO2006018459A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0666150 A1 19950809; **EP 0666150 A4 19951115**; **EP 0666150 B1 19981021**; DE 69414089 D1 19981126; DE 69414089 T2 19990318; KR 100336044 B1 20021122; KR 950703434 A 19950920; US 5580209 A 19961203; WO 9505270 A1 19950223

DOCDB simple family (application)
EP 94923081 A 19940805; DE 69414089 T 19940805; JP 9401300 W 19940805; KR 19950701472 A 19950417; US 39729095 A 19950320